

REMARKS

Claims 1-22 have been examined. Claims 23-26 have been added. Claims 1-26 are pending in the application. Claims 1, 3, 7-15, 17- 20 and 22 have been amended to clarify the subject matter. No new matter has been added. In particular, independent claim 1 has been amended to recite a system having a modulation control device that "assigns a modulation parameter to a call of a mobile which is using one of a plurality of frequency channels wherein the modulation control device uses at least the modulation parameter to modulate the call and uses the modulation parameter to identify the call, the mobile and the frequency channel." Likewise, independent claim 17, which recites a method for performing the system elements of claim 1, has been amended in a similar manner as claim 1. Independent system claims 7 and 12 have been rewritten in dependent form to depend from independent system claim 1. Likewise, independent method claims 13, 14, 20 and 22 have been rewritten in dependent form to depend from independent method claim 17. Also, some features from claim 1 were removed and added to new dependent claim 25. In a similar manner, certain features of claim 17 were removed and added to new dependent claim 24. New dependent claims 23 and 26 recite that the "modulation parameter is a phase adjustment value."

Thus, there are 26 total claims with two independent claims 1 and 17. Claims 2-12, 25 and 26 depend from claim 1 and claims 13-16 and 18-24 depend from claim 17.

In addition, Applicant received a notice of abandonment dated October 9, 2003. Applicant requests that the current application be revived and thus submits a *Petition For Revival of an Application for Patent Abandoned Unintentionally under 37 CFR 1.137(b)*. Applicant respectfully requests that the Petition be granted and the response be considered.

Claim Rejections 35 USC 103

Claims 1-22 have been rejected. In particular, claims 1-22 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Dahlin (U.S. Pat. 5,199,031) in view of Raith (U.S. Pat. 5,729,531).

Independent claim 1 (and 17) has been amended to clarify the subject matter:

1. (currently amended) A system for increasing the capacity of a wireless communication network, comprising:
a modulation control device that assigns a modulation parameter to a call of a mobile which is using one of a plurality of frequency channels wherein the modulation control device uses at least the modulation parameter to modulate the call and uses the modulation parameter to identify the call, the mobile and the frequency channel.

Applicant respectfully submits that neither Dahlin nor Raith nor their combination teach or suggest the claimed invention.

In particular, Dahlin fails to teach or suggest a technique for increasing “the capacity of wireless communication” by assigning a modulation parameter to a call of a mobile and using at least the modulation parameter to modulate the call and using the modulation parameter to identify the call, the mobile and the frequency channel as recited in claim 1 of the present invention. The Dahlin system discloses a technique for identifying control channel time slots. In particular, the system converts existing traffic channels and assigns them to dedicated control channels used for control signaling. As a result, the system of Dahlin actually **reduces the capacity** of a communication network because it transforms existing traffic channels to control channels thereby reducing the number of traffic channels available for call communication. In sharp contrast, the claimed invention “increases the capacity of wireless communication network.” Thus, Dahlin fails to teach or suggest a system that “increases the capacity of wireless communication network” as recited in amended claim 1

Moreover, Applicant asserts that Dahlin fails to teach or suggest a technique that assigns a modulation parameter to a call of a mobile and “uses at least the modulation parameter to modulate the call and uses the modulation parameter to identify the call, the mobile and the frequency channel” as recited in amended claim 1. The Office Action states that Dahlin discloses a modulation parameter for assigning a call to frequency channel and makes reference to column 7, lines 30-43 and column 7, lines 54-61 for

support. We submit that this passage of Dahlin has been mischaracterized. Instead, the passage refers to controller 130 which generates a frequency corresponding to the first dedicated control channel. Control channels are used for handling control signals and not for carrying traffic data of a call. The control channels are identified by marking each control channel with a control channel indicator, such as, for example, synchronization words or control channel identification words. In other words, Dahlin provides dedicated control channels for control signaling, whereas the current application uses a modulation parameter to “modulate a call” and uses the modulation parameter to “identify the call, the mobile unit and the frequency channel.” Thus, Dahlin fails to teach or suggest a system that uses a modulation parameter “modulate a call” and to “identify the call, the mobile unit and the frequency channel” as recited in amended claim 1.

Raith fails to teach or suggest a technique for increasing “the capacity of wireless communication” by modulating calls using a modulation parameter as recited in amended claim 1. Raith discloses a technique for reassigning mobile stations a new phase within a channel. Initially, it applies a general allocation method to evenly distribute the mobile stations on the available channels. After the mobile units are communicating, it changes the phase of some mobile stations on a channel which has become heavily loaded. In other words, Raith does **not** increase the capacity of the network - it simply reassigns phases to mobile stations based on the channel load. In sharp contrast, the claimed invention “increases the capacity of wireless communication network.” Thus, Raith fails to teach or suggest a system that “increases the capacity of wireless communication network” as recited in amended claim 1

Moreover, Raith fails to teach or suggest a modulation parameter that “identifies the call, the mobile and the frequency channel” as recited in claim 1. Raith, as mentioned above, simply changes the phase of some mobile stations on a channel which has become heavily loaded. However, such a phase change is **not** used to identify the call, the mobile and the frequency channel as claimed in the current application. Thus, Raith fails to teach or suggest this feature of claim 1.

Furthermore, there is no suggestion or motivation to combine the teachings of Dahlin and Raith. For example, both references fail to teach a technique that "increases the capacity of wireless communication network" as recited in claim 1. Assuming arguendo that there was some motivation to combine the teachings of Dahlin and Raith, all that would result is a system that **decreases** the capacity of a wireless network.

Independent claim 17 has been amended and recites a method that includes features similar to those of amended system claim 1. Claim 17 should be allowable for at least the same reasons as claim 1. Moreover, claims dependent on claim 1 and 17 should be allowable for at least the same reasons as their respective base claims.

Request for Reconsideration pursuant to 37 CFR 1.111

Having responded to each and every ground for objection and rejection in the Office Action mailed on May 22, 2002, Applicant requests reconsideration in the instant application pursuant to 37 CFR 1.111 and requests that the Examiner allow claims 1-26 and pass the application to issue. If there is any point requiring further attention prior to allowance, the Examiner is asked to contact Applicants' counsel who can be reached at the telephone number listed below.

Respectfully,
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